

**THE GENUS BLAENA WALKER (=MACRYMENUS SIGNORET)
WITH THE DESCRIPTION OF FOUR NEW SPECIES AND A
KEY TO THE KNOWN FORMS (HEMIPTERA: CYDNIDAE)**

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Plates xlix-l, fig. 1-13

In 1868 Walker described as new the genus *Blaena* with the inclusion of a single species, *setosa*, from an unknown locality. In 1880 Signoret described *Macrymenus membranaceus* as a new genus and species from Australia. Distant, in 1899, pointed out the synonymy of the two names and reduced Signoret's scientific name to synonymy—*Blaena* taking precedence over *Macrymenus* by virtue of both being based on the same species and Walker's generic name having twelve years priority. This treatment is here confirmed.⁽²⁾

The present paper is based on specimens from two sources: from the South Australian Museum, made available through the kindness of The Museum Board and Dr. E. T. Giles; and from the Museum of Comparative Zoology, Harvard University, loaned by Drs. J. Bequaert and P. J. Darlington. To the curators of these institutions the author is grateful. He also wishes to thank Dr. W. L. Brown, of the Museum of Comparative Zoology, for aid in locating certain Australian localities as they appeared on specimens. The illustrations are by my wife, Elsie Herbold Froeschner.

The format used in this paper follows that of the author in his Monograph of the Cydnidae of the Western Hemisphere which is now in press. Measurements are given in millimeters and are based on one to five specimens of each sex. If less than five were used the number is indicated.

(1) Dept. Zoology and Entomology, Montana State College, Bozeman, Montana, U.S.A. Contribution from Montana State College Agricultural Experiment Station, M.S. 38, paper No. 432 Journal Series.

(2) After this paper had been submitted for publication a grant from the National Science Foundation (NSF G7118) made possible personal examination of the types concerned. As above, the results supported Distant's contentions and not Bergroth's (1912, Amer. Mus. Nat. Hist., Bull, 31: 343-348) belief that they were separate species.

Genus *Blaena* Walker

1868 *Blaena* Walker, Catal. Hemip.-Heterop. Brit. Mus., part 3, p. 537.

1880 *Macrymenus* Signoret, Bull. Soc. Ent. France, ser. 5, vol. 10, p. xviii.

1899 *Blaena* Distant, Ann. Mag. Nat. Hist., ser. 7, vol. 4, p. 224.

Diagnosis: The short corium, which occupies less than half (about two-fifths) of the hemelytral length, plus the obliquely stylated eyes will separate members of this genus from any other Cydnidae.

Description: Medium sized, elongate, sides subparallel; dorsum flattened to weakly convex. *Head*: Little wider than long, dorsally flat to weakly convex with coarse, crowded punctures; lateral margins diverging from preocular emarginations; juga meeting anterior to clypeus, distinctly though narrowly reflexed marginally, apex rounded, truncated or slightly produced; dorsally with several scattered or many long bristles in addition to primary bristles; eyes small, higher than long, prominent, oblique, moderately stylated; ocelli very small, placed far behind line connecting hind margins of eyes, much closer to eyes than to midline of head; antennae five segmented, I and II shorter than III, IV and V usually longer than latter and variable in relation to each other; bucculae much higher than labial II, equally elevated for full length, abruptly terminated posteriorly at base of head; labium surpassing anterior coxae, sometimes reaching to bases of midcoxae, I shortest, II and III each longer than IV, II compressed but not dilated. *Pronotum*: Length more than half of width; lateral margins usually entire, narrowing from near base, sinuate or not at ends of transverse impression; dorsal surface of both lobes coarsely and closely punctate nearly or quite to lateral edge; anterior margin strongly concave; lateral submargin with a row of two, six or more setigerous punctures, only one or two posterior to transverse impression; disc usually with several to many scattered long hairs. *Scutellum*: Width distinctly greater than length, subtriangular, apex a broad, rounded, obtuse angle; disc, except for oblique areas in basal angles, strongly and closely punctate. *Hemelytra*: Corial areas well-defined, membranous suture oblique, strongly and angularly emarginate at end of radial vein; costa sharp, weakly explanate, strongly incurved apically so as to expose densely punctate connexivum, submarginally without or with five or fifteen setigerous punctures; membrane about twice as long as basal width, nearly two-thirds of hemelytral length, dusky, usually paler at base; veins darker, simple with few branches or mostly reticulate. *Propleuron*: Shining, densely and strongly

punctate; prosternal carinae either low and indistinct or thick and high enclosing a labial trough deeper than height of labial II; anterior margin nearly straight, slightly emarginate between prosternal carinae. *Mesopleuron*: (fig. 6) Nearly flat, closely and distinctly punctate, including evaporatorium which follows posterior margin to lateral margin of sclerite; posterior margin entire; medioventral line strongly carinate. *Metapleuron*: (fig. 6) Nearly flat, evaporatorium extensive, but not reaching lateral margin, punctate; osteole opening prominently and ventrally at base of elongate (length four to five times width), partially sulcate, polished and elevated peritreme. *Legs*: Moderately long; anterior tibia (fig. 10) subterete to somewhat widened toward apex, not prolonged beyond tarsal insertion, with six to eight distinct to strong spines dorsally; tarsal II shortest; middle and posterior tibiae terete, latter in male simple or variously contorted, spined and haired according to species; middle and posterior femora variously armed ventrally according to species. *Sternites*: Convex, with numerous prominent punctures, with or without setigerous tubercles; sometimes with a strong channel within lateral margins (fig. 9); trichobothria typical of the subfamily Cydninae. *Terminalia*: Male genital capsule opening dorsally or subdorsally; gonostyli uniformly of one type in all species (fig. 8); female genital plates of type usually found in pentatomoids.

Genotype: *Blaena setosa* Walker, monobasic. The genotype of *Macrymenus* is *M. membranaceus* Signoret by virtue of the monobasic original proposal of the genus. The present study confirms this synonymy which was first pointed out by Distant in 1899 (Supra).

Distribution: The range of this genus, from the more than fifty specimens at hand, appears restricted to the continent of Australia.

Discussion: Members of this genus appear especially noteworthy due to the stylated eyes and the strongly modified hind legs of the males of some species. The relatively simple anterior tibiae coupled with such strongly contorted hind tibiae would suggest that these forms are not adapted to a burrowing habit. However, three of the specimens examined were labelled from "soil at base of talus", "under dead [?] log". Observations on habits are needed.

The genus, as determined during the present study, may easily be assigned to the subfamily Cydninae as redefined by Froeschner (in press) since it possesses the necessary trichobothrial arrangement, primary setigerous punctures on head and pronotum, venation of hind wing and other features. The exposed abdominal sternites in this as

in other Cydnidae are actually segments III to VII, with I and II reduced and hidden under the posterior lamellar expansion of the metapleuron and VIII being telescoped into VII. This interpretation is used in the descriptions in the present paper.

Considering the obvious clues to specific distinctions which are furnished by the modifications of the hind tibiae of the males as well as sculpturing and vestiture it is surprising that not more than one species was described under each of the proposed generic names. In this paper five species are considered. They may be separated by the following key designed to work with both sexes:—

KEY TO THE SPECIES OF *BLAENA* WALKER

1. Lateral pronotal margins strongly and broadly constricted between lobes (fig. 4) *coarctata* sp. nov.
 Lateral margins straight or faintly sinuate between lobes 2
2. Prosternal carinae high, forming sides of a labial trough as deep as height of labial II; abdominal sternites without or with only a vague sublateral groove 3
 Prosternal carinae vague, only faintly elevated; abdominal sternites sublaterally with a distinct, broad, deep groove (fig. 9), the punctures within it much finer than those not in groove *setosa* Walker
3. Median line of pronotum and scutellum with a prominent, calloused carina; transverse impression of pronotum deep, abruptly interrupted sublaterally (fig. 5) *mediocarinata* sp. nov.
 Median line of pronotum not or only vaguely carinate; transverse pronotal impression neither deep nor interrupted sublaterally 4

4. Scutellum weakly and broadly sulcate on midline of basal half; connexivum with a single, subapical setigerous puncture marginally on each segment *subsulcata* sp. nov.

Scutellum not sulcate on median line; connexivum with three or more setigerous punctures marginally on each segment *multitricha* sp. nov.

***Blaena coarctata* sp. nov.**

Fig. 4, 7, 12

Diagnosis: The strong, wide emargination of the lateral margin of the pronotum opposite the ends of the transverse impression (fig. 4) marks both sexes of this species as distinct from others in the genus. The strongly hooked apex of the hind tibia is also uniquely distinctive of the male.

Description: Male: Parallel-sided, slender for the genus. *Head:* length little more than three-fourths width, 0.93 (0.85-1.04); 0.98 (0.93-1.04); interocular width, 0.60 (0.58-0.63); anterior outline parallel in front of eyes, rounded at apex; jugum mostly flat, slightly elevated marginally, with few long hairs submarginally and discally; clypeus weakly convex, strongly and closely punctured; antennals, I, 0.26 (0.24-0.29): II, 0.37 (0.31-0.43): III, 0.57 (0.53-0.66): IV, 0.79 (0.75-0.83): V (only one specimen with this segment), 0.88; labium reaching bases of middle coxae, segments, I, 0.27 (0.24-0.29): II, 0.55 (0.54-0.56): III, 0.57 (0.55-0.60): IV, 0.42 (0.41-0.43). *Pronotum:* Length more than half width, 1.30 (1.25-1.43): 2.07 (1.90-2.32); discally with scattered hairs; side margins slightly expanded, broadly rounded on anterior half, and broadly emarginate opposite ends of transverse impression (fig. 4), with a submargin row of seven setigerous punctures; hind margin broadly sinuate medially. *Scutellum:* Distinctly broader than long, 1.23 (1.17-1.36): 1.17 (1.10-1.30); somewhat convex, median line usually vaguely carinate. *Hemelytron:* Punctures of costal area weaker and less distinct than those of clavus and disc; costal margins without setigerous punctures but with scattered hairs similar to those of disc; membrane reaching middle of last tergite, leaving genital capsule exposed, veins straight and simple. *Connexivum:* Segments IV, V, VI and VII each with a strong, subapical setigerous puncture on margin. *Propleuron:* Densely and coarsely punctate except in lateral

submarginal line; prosternal carinae very low and indistinct; mid-ventral line sharply carinate. *Meso- and Metapleura*: Virtually as in fig. 6. *Legs*: Anterior tibiae subterete, slightly expanded on apical third; anterior femur with a few low setigerous tubercles ventrally; middle femur with numerous small setigerous tubercles ventrally; posterior femur with low blunt tubercles on anteroventral margin and several more-prominent, acute tubercles on posteroventral margin; hind tibia as in fig. 12, slender, concavely curved on basal four-fifths, abruptly decurved at apical fifth armed ventrally from base to subapical bend with a series of tubercles increasing in length until they form stout spines. *Sternites*: Densely and uniformly punctate across full width except for a narrow strip laterally on III, IV and V; surface with numerous minute, inconspicuous setigerous tubercles; posterior margin finely denticulate. *Terminalia*: Genital capsule a little finer and more densely punctate than sternites; posterior margin deeply emarginate, with a prominent bluntly triangular projection medially (fig. 7); gonostylus similar to fig. 8. Length of body, 5.46 (5.10-5.85).

Female (based on three specimens): Similar to males but hind legs not modified as there. *Head*: Length: width:: 0.90 (0.85-0.93): 0.97 (0.96-1.00); interocular width: 0.59 (0.58-0.60); antennals, I, 0.26 (0.26-0.27): II, 0.31 ((0.31-0.32): III, 0.54 (0.53-0.55): IV, 0.75 (0.72-0.79): V, 0.82 (0.80-0.84); labials, I, 0.32 (0.30-0.36): II, 0.50 (0.50-0.51): III, 0.51 (0.50-0.53): IV, 0.42 (0.41-0.43). *Pronotum*: Length: width:: 1.25 (1.20-1.35): 2.05 (2.03-2.06). *Scutellum*: Length: width:: 1.15 (1.11-1.18): 1.17 (1.16-1.20). Length of body, 5.13 (5.08-5.17).

Type Data: Holotype male and allotype female, both in the collection of the South Australian Museum, are labelled "Woodforde Cr., Andamooka Rgs., 31, Aug. 1948, G. F. Gross". Paratypes: same data as types, two males (SAMus, RCF); "Mulwala, N.S.W., 1-16-53, F. E. Wilson", one female; "Ultima [Victoria], 8-1915", two males and one female (SAMus).

Distribution: So far this species is known only from the southeastern part of Australia as indicated by the data above.

Discussion: This is the most slender and shining of the species of the genus. The distinctly emarginate lateral pronotal margins suggested the specific name.

***Blaena mediocarinata* sp. nov.**

Fig. 5

Diagnosis: The distinctly carinate midline of the pronotum coupled with the abrupt and very deep triangular impression on either side of the scutellum will separate this species from others in the genus, even from *subsulcata* with which the male of this agrees in having the straight, simple, hind tibia.

Description: (Based on a single male.) *Male*: Elongate oval, sides parallel. *Head*: Shorter than wide, 0.84: 1.10; interocular width, 0.73; anterior outline parallel in front of eyes, flatly rounded apically; jugum convex above, forming a ridge paralleling elevated, punctate clypeus, lateral margins broadly recurved, submargin with a single setigerous puncture in addition to the preocular one; antennals, I, 0.23: II, 0.14: III, 0.56: IV, 0.53: V, 0.68; labium reaching between bases of middle coxae, segments, I, 0.33: II, 0.54: III, 0.53: IV, 0.44. *Pronotum*: Length more than half width, 1.43: 2.40; lateral margin distinctly explanate with a single setigerous puncture on anterior lobe and one on the strong prebasal angular projection; transverse impression deep, abruptly interrupted by carinate midline and again half way to lateral margins; punctures of anterior lobe rounded, of posterior lobe (except umbones) with elongate, crowded punctures making surface appear rugose; anterior lobe with a transverse row of four setigerous punctures in front of transverse impression; posterior margin weakly bilobed. *Scutellum*: Width greater than length, 1.47: 1.10; median line in part prominently carinate; decidedly elevated basal third coupled with deep lateral impressions causing apical two-thirds to appear abruptly depressed; punctures sparser on apical part. *Hemelytron*: Distinctly punctate to costal margin, with no setigerous punctures; membrane with a whitish spot basally at outer and inner angles; venation irregularly branched, more distinctly so marginally. *Connexivum*: Segments V, VI and VII each with a single subapical setigerous puncture on margin. *Propleuron*: Coarsely and closely punctate except in lateral submarginal line; prosternal carinae thick and very much elevated, enclosing a labial groove deeper than height of labial II. *Meso- and Metapleura*: Virtually as in fig. 6. *Legs*: Anterior tibia terete, weakly expanding toward apex; hind femur and tibia simple, not specially modified. *Sternites*: Not impressed laterally; punctation laterally dense and coarse, absent from broad lateral band on V and VI, very widely scattered and much finer on broad medioventral area; without setigerous tubercles. *Terminalia*: Genital

capsule punctate to rugo-punctate, hind margin weakly concave, with no medioapical prominence; gonostylus similar to fig. 8. Length of body, 4.7 mm.

Female: Unknown.

Type Data: Holotype male, "Margaret River, S. W. A., No. 5, Harvard Austr. Exp., P. J. Darlington", in Museum of Comparative Zoology at Harvard University.

Distribution: The species is known only from the type locality in the southwestern corner of Australia in the State of Western Australia.

Discussion: As usual, there is considerable risk in describing a new species from a single specimen, but if that specimen contains more than one superficial difference from its nearest relatives such risk is greatly reduced. Here characters of the antenna (II much shorter than I, 14:23), pronotum (carinate median line, lateral sub-basal angle bearing a single setigerous puncture, transverse impression deep, punctation of posterior lobe greatly elongate), and scutellum (transverse, elevated basal third, very deep triangular impressions laterally, broad low median carina, two arrangements of punctures), are all unique with this species and any one of them will separate it from the others in the genus. In a group as poorly known as the Cydnidae there is more advantage to calling such a form to the attention of other workers than there is in burying it among the unplaced specimens in one's collection.

***Blaena multiricha* sp. nov.**

Fig. 13

Diagnosis: As the species name suggests, one of the outstanding features is the abundance of long hairs on dorsal (except membrane) and ventral surfaces and legs. The hind leg of the male has the ventral femoral armature including several large teeth on apical half and the tibia distinctly bisinuate (fig. 13).

Description: *Male* (one specimen): Elongate oval, sides subparallel. *Head*: Length: width:: 0.98:1.13; interocular width 0.70; surface with numerous long hairs; anterior outline subparallel in front of eyes, broadly rounded apically; juga flat with lateral margins slightly raised; clypeus subconvex, punctate; antennals, I, 0.23: II, 0.30: III, 0.50: IV, 0.66; labium surpassing front coxae but not reaching middle ones, segments, I, 0.36: II, 0.53: III, 0.54: IV, 0.38. *Pronotum*: Length more than half width, 1.36: 2.60; discally with many long hairs, these

more abundant anteriorly and laterally where they completely confuse the submarginal row of setigerous punctures; lateral margin entire, straight at ends of nearly obsolete transverse impression; punctation on posterior lobe weakly elongate; posterior margin broadly and very weakly emarginate. *Scutellum*: Length: width:: 1.30: 1.49; discally with numerous scattered long hairs. *Hemelytron*: Clavus and corium with numerous long easily abraded hairs, costally these much longer and about six to fifteen in number; membrane reaching onto genital capsule, venation moderately distinct, reticulate. *Connexivum*: Margin of each segment with several strong setigerous punctures making the edge appear denticulate. *Propleuron*: Densely and coarsely punctate except in lateral submarginal line; prosternal carinae thick, high, enclosing a labial groove about as deep as height of labial II. *Meso- and Metapleura*: Virtually as in fig. 6, metapleural evaporatorium a little less expanded. *Legs*: All with several to numerous long hairs, of which many are as long as or longer than the spines; anterior tibia not markedly widened; posterior femur with three or four (variable on two femora of lone specimen) long, strong teeth (fig. 13); posterior tibia bowed, thickened medially and apically and with tubercles and hairs as illustrated (fig. 13). *Sternites*: Punctation coarse and dense except for impunctate lateral margin of IV and antero-lateral angle of V; without setigerous tubercles but with numerous short, erect or nearly erect hairs; hind margins finely denticulate, with a small but strong spine near ends. *Terminalia*: Genital capsule coarsely and closely punctate, apical margin with broad, median emargination which is convex medially; gonostylus similar to fig. 8.

Female (two specimens): Similar to male except that it usually has more hairs, posterior legs are not modified as there, sternites IV and V punctate to margin, and sublateral spine on posterior margin of sternites less distinct or absent. *Head*: Length: width:: 0.97 (0.88-1.06): 1.16 (1.12-1.20); interocular width, 0.70 (0.70-0.70); antennals, I, 0.25 (0.25-0.26): II, 0.33 (0.33-0.34): III, 0.50 (0.50-0.51): IV, 0.68 (0.66-0.71): V, 0.65 (missing on one); labials, I, 0.37 (0.33-0.41): II, 0.51 (0.50-0.53): III, 0.39 (0.37-0.41). *Pronotum*: Length: width:: 1.43 (1.30-1.56): 2.62 (2.47-2.77). *Scutellum*: Length: width:: 1.47: 1.69 (other damaged). Length of body, 5.48 (5.12-5.84).

Type Data: Holotype male and allotype female, both in collection of the South Australian Museum, are labelled "Cunnamulla, Q., H. Hardcastle", the allotype having been damaged by dermestids. *Paratypes*: Woodforde Ck., Andamooka Rgs., South Australia, 1, Sept., 1948, G. F. Gross, two females (SAMns, RCF).

Distribution: To date this species is known only from South Australia and Queensland in Australia.

Discussion: The species name was suggested by the abundant long hairs on the dorsal (except membrane) and ventral surfaces as well as on all legs.

***Blaena setosa* Walker**

Fig. 1, 2, 3, 6, 8, 9, 10, 11

1868 *Blaena setosa* Walker, Cat. Hemip. Brit. Mus., 3: 537.

1880 *Macrymenus membranaceus* Signoret, Ann. Soc. Ent. France, 1880: xviii.

Diagnosis: The virtual absence of prosternal carinae coupled with the lack of an emargination in the lateral margins of the pronotum easily separate this species from others in the genus. The male may be readily recognized by the strong curvature of the basal two-thirds of the hind tibiae (fig. 11).

Description: *Male* (fig. 1): Elongate oval, parallel-sided. *Head*: Length: more than four-fifths width, 1.10 (1.07-1.14): 1.26 (1.23-1.28); interocular width, 0.78 (0.76-0.80); anterior outline diverging from preocular emargination, rounded at apex; jugum flat, margins narrowly reflexed, mesoapical angles produced, submarginally with two setigerous punctures anterior to preocular one; clypeus convex, punctate; antennals, I, 0.26 (0.24-0.28): II, 0.41 (0.37-0.43): III, 0.51 (0.50-0.54): IV, 0.65 (0.64-0.66): V, 0.62 (0.60-0.66); labium surpassing front coxae but not reaching base of middle coxae, segment, I, 0.30 (0.30-0.31): II, 0.53 (0.53-0.54): III, 0.51 (0.48-0.53): IV, 0.40 (0.38-0.43). *Pronotum*: Length about half of width, 1.54 (1.49-1.59): 3.00 (2.86-3.09); lateral margins not emarginate; lateral submargin with a row of a dozen setigerous punctures; anterior lobe with numerous scattered long hairs; posterior lobe with a transverse row of similar vestiture; hind margin broadly and shallowly concave medially. *Scutellum*: Length less than width, 1.49 (1.49-1.51): 1.71 (1.69-1.75); median line weakly or obsoletely carinate. *Hemelytron*: Punctures of costal area weaker and finer than on rest of corium; subcostal row of five setigerous punctures; membrane reaching onto genital capsule, veins simple or furcate, sometimes with a few closed cells. *Connexivum*: Lateral margins of each segment with three or four prominent setigerous punctures. *Propleuron*: Coarsely punctate; prosternal carinae absent; medioventral line distinctly carinate. *Meso- and Metapleurae*: As in fig. 6. *Legs*:

Anterior femur with setigerous punctures ventrally; anterior tibia (fig. 10) weakly expanding; middle femur with setigerous punctures and with one or two movable spines apically on both ventral margins and two or three stout spines medioventrally on basal half; posterior femur (fig. 11) ventrally with five stout spines, the median one distinctly stouter and longer; posterior tibia (fig. 11) with basal two-thirds strongly bowed outward, apical third straight, ventral margin of basal two-thirds with a double row of strong tubercles which become finer toward distal end of curvature and numerous long hairs which become sparser toward base; distal end of curvature marked by a strong, triangular tooth directed basad. *Abdomen*: Sublaterally with a strong, continuous trough reaching from base to base of genital capsule (fig. 9), punctures in this furrow much finer than elsewhere on sternites; sternites ventrad of furrow with scattered coarse punctures interspersed with numerous setigerous tubercles, these more abundant along moderate median band. *Terminalia*: Genital capsule coarsely and closely punctate, apical margin slightly concave and without median prominence; gonostylus as illustrated (fig. 8). Length of body, 6.46 (6.21-6.77).

Female: Mostly similar to male but with unmodified hind legs and no setigerous tubercles on abdominal sternites. *Head*: Length: 1.02 (1.01-1.03): 1.18 (1.15-1.24); interocular width, 0.75 (0.73-0.80); antennals, I, 0.24 (0.23-0.26): II, 0.35 (0.31-0.40): III, 0.43 (0.41-0.47): IV, 0.55 (0.53-0.61): V, 0.55 (0.53-0.58); labials, I, 0.29 (0.28-0.31): II, 0.45 (0.42-0.50): III, 0.49 (0.46-0.53): IV, 0.41 (0.40-0.44). *Pronotum*: Length: width:: 1.53 (1.40-1.69): 2.69 (2.55-2.94). *Scutellum*: Length: width:: 1.37 (1.31-1.55): 1.52 (1.43-1.69). Length of body, 5.80 (5.28-6.23).

Type Data: Walker's type of *Blaena setosa* was described from a female whose place of origin was indicated by a question mark as being unknown; it is now in the British Museum of Natural History. Signoret's types "proviert del'Australie", and are in the Signoret collection in the Naturhistorisches Museum in Vienna. The male now labelled type is hereby designated the lectotype and the associated female lectoallotype.

Distribution: The more than thirty specimens examined had all been taken on the continent of Australia from the States of Western Australia, South Australia, Queensland and Victoria.

Discussion: Since this species is the genotype its accurate fixation was imperative. Notes and sketches kindly furnished by Dr. W. E.

China of the British Museum and Dr. Max Beier of the Naturhistorisches Museum confirmed without doubt Distant's earlier report that Walker's and Signoret's generic and species names were based on the same species.

A comparison of the full-figure illustration in the present paper and Signoret's habitus and head drawings on plate 15, fig. 204 in his "Revision" (Ann. Soc. ent. France, ser. 6, vol. 3) reveals that his figures are erroneous in several features including the generically important stylated eyes and the uniquely modified hind legs of the male.

Notes on three specimens from Victoria indicated that they had been taken "in soil" and "under dead logs". Collection records were for the months of September, October, December and January.

Specimens Examined: 18 males, 11 females. *Australia*: Queensland: Bluff, 1 male (SAMus). South Australia: Lake Eyre, Dec. 1951, G. F. Gross, one female (SAMus); Mt. Remarkable, Oct. 1925, F. E. Wilson, one male (SAMus); Pt. Lincoln, one male (SAMus); Woodforde Ck., Andamooka Rgs., 1, Sept., 1948, G. F. Gross, eight males, three females (SAMus, RCF). Victoria: Carumley, 13 Jan., 1887, Tepper, one male, two females (SAMus). Western Australia: Beverley, E. F. Boulay, two males, three females (SAMus); Geraldton, Oct. 11, P. J. Darlington, four males, one female (MCZ); Mullewa, W. D. Dodd, one male, one female (SAMus).

***Blaena subsulcata* sp. nov.**

Diagnosis: The broad, shallowly sulcate median line of the scutellum gives a ready means for separating this species from the others in the genus. The males of this and *mediocarinatus* are the only ones within the genus with straight, unmodified hind tibiae.

Description: *Male* (one specimen): Elongate oval, sides subparallel. *Head*: Slightly wider than long, 1.16:1.10; interocular width 0.74; anterior outline weakly diverging from preocular emargination, broadly rounded at apex and with mesoapical angles usually slightly produced; juga convex, forming a strong but irregular ridge either side of prominent, punctate clypeus, lateral margin distinctly reflexed, with submarginal preapical setigerous puncture in addition to preocular one; antennae, I, 0.23; II, 0.23; III, 0.64, IV, 0.76; V, 0.76; labium reaching bases of middle coxae, segments, I, 0.33; II, 0.53; III, 0.73; IV, 0.43. *Pronotum*: Length more than half width, 1.51: 2.70; lateral margins weakly explanate, virtually straight opposite ends of transverse impression, with submarginal row of five or six setigerous

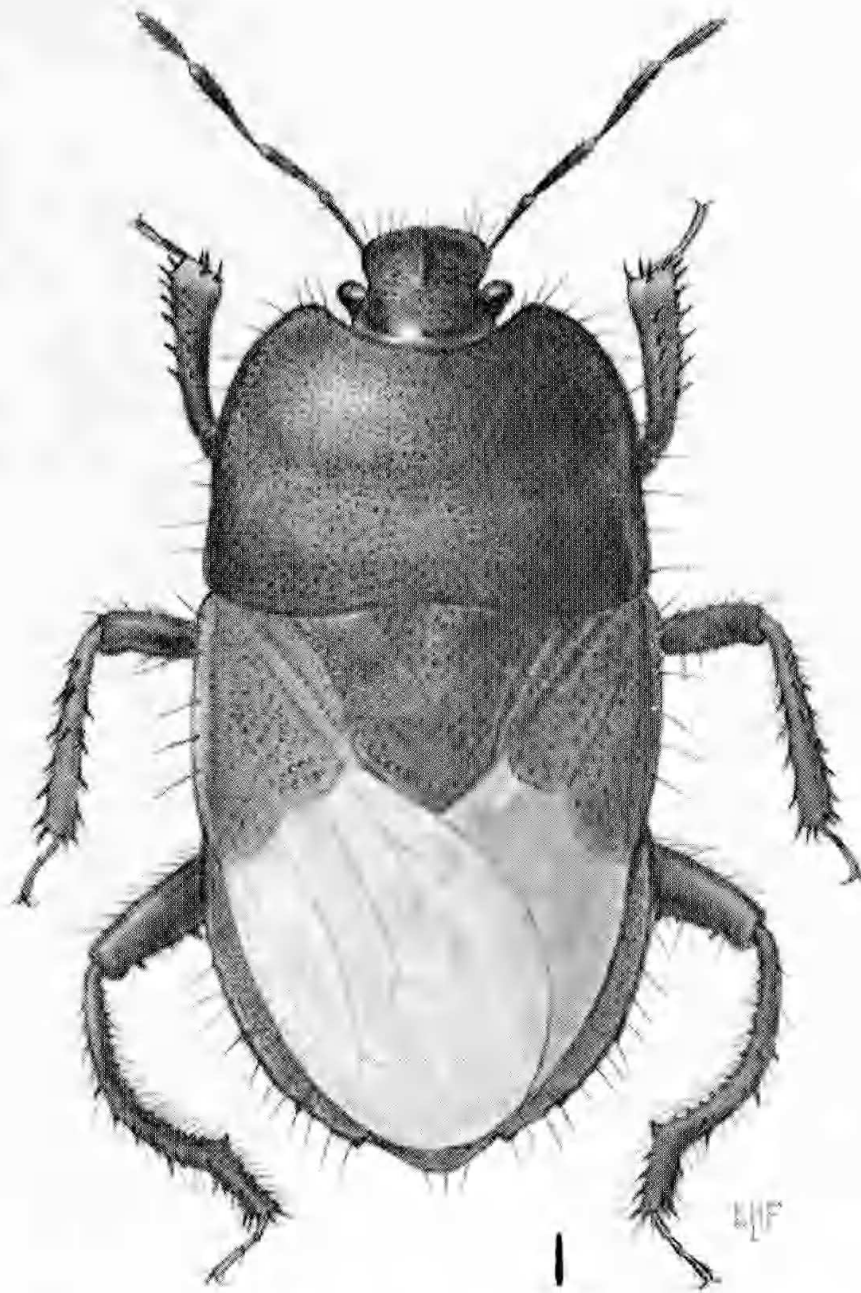


Fig. 1. *Blacus setosus*, general habitus, dorsal view.

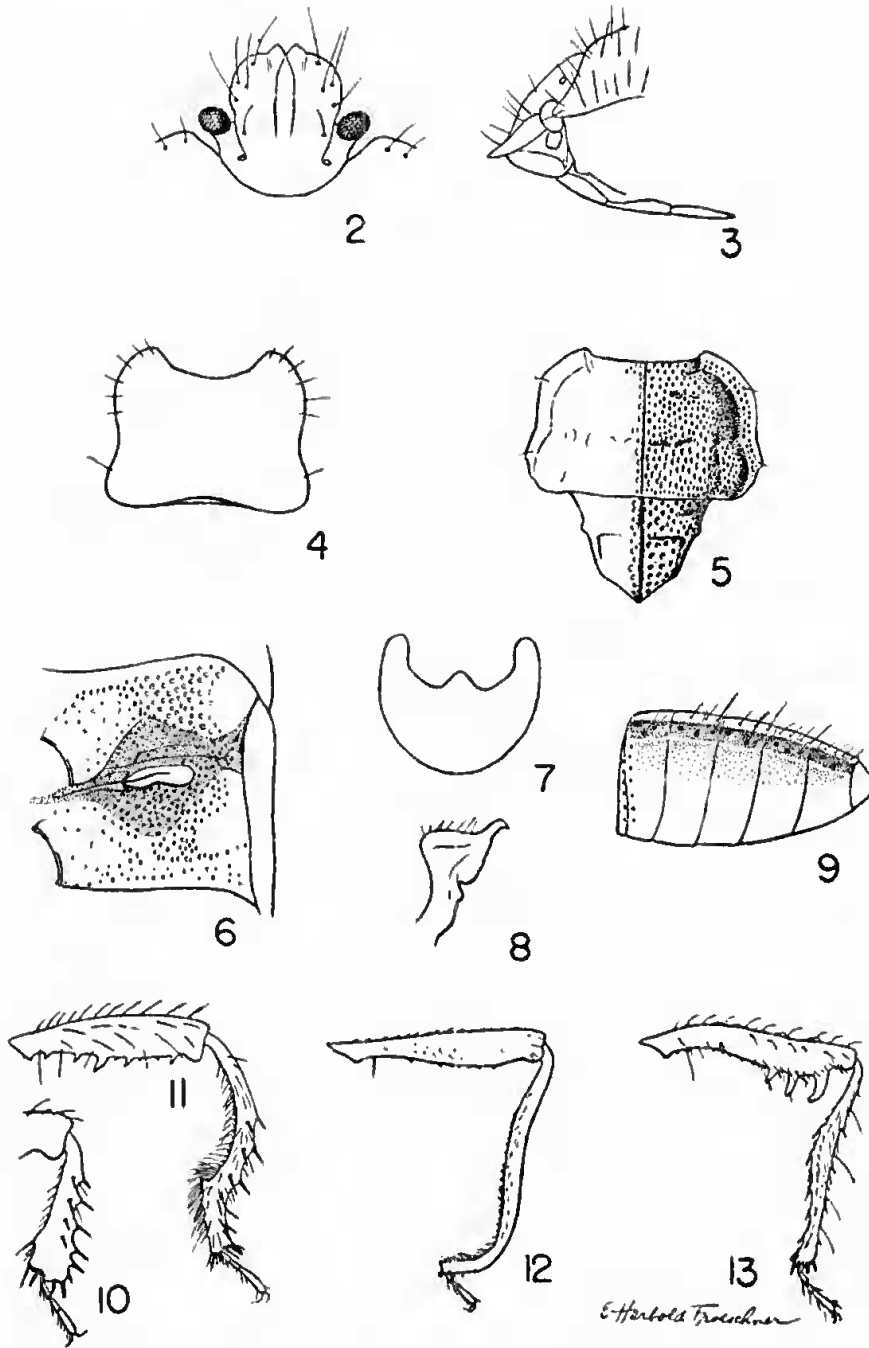


Fig. 2. *Blaena setosa*, head in dorsal view, X 14. Fig. 3. *Blaena setosa*, head in lateral view, X 14. Fig. 4. *Blaena coarctata*, pronotum in dorsal view, X 10. Fig. 5. *Blaena mediocarinata*, pronotum and scutellum in dorsal view, X 10. Fig. 6. *Blaena setosa*, meso- and metapleura in ventral view, X 10. Fig. 7. *Blaena coarctata*, male genital capsule in posterior view, X 25. Fig. 8. *Blaena setosa*, gonostylus in mesal view, X 32. Fig. 9. *Blaena setosa*, abdomen in lateral view, X 8. Fig. 10. *Blaena setosa*, anterior leg in anterior view, X 10. Fig. 11. *Blaena setosa*, posterior leg in anterior view, X 10. Fig. 12. *Blaena coarctata*, posterior leg in anterior view, X 12. Fig. 13. *Blaena multitricha*, posterior leg in anterior view, X 12.